



Newsletter Topics

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NEWS ON VACCINES AND VACCINE-PREVENTABLE DISEASES

Vaccine for Children (VFC) Resolution Updates Childhood Tdap Recommendations

- Tdap is now recommended down to 7 years of age if the child's DTaP immunization series is incomplete or missing.
- Tdap should be given to children 7 through 18 years of age who:
 - Have received tetanus and diphtheria containing vaccines (DT or Td) instead of DTP/DTaP for some or all doses of the childhood series.
 - Have received fewer than 5 doses of DTP/DTaP or 4 doses if the fourth dose was administered at age 4 years or older.
 - Have never been vaccinated against tetanus, diphtheria, or pertussis (no doses of pediatric DTP/DTaP/DT or Td).
 - The preferred schedule for a previously unimmunized child or adult, is a single Tdap dose, followed by a dose of Td four weeks after the first dose and a second dose of Td 6-12 months later. If Tdap is not administered as the first dose, Tdap can be substituted for any of the other Td doses in the series.

<http://www.cdc.gov/vaccines/programs/vfc/downloads/resolutions/1010tdap-508.pdf>

Pertussis Vaccine Added to Arizona Child Care Staff Immunization Rules

- ADHS child care licensing rules were updated 9/30/2010 to add pertussis vaccine to the immunization requirement for child care staff workers (R9-5-402.A5).
- The other required vaccines for child care staff workers are measles, mumps, rubella, and diphtheria.

See under New Center Rules at <http://www.azdhs.gov/als/childcare/index.htm>

Clostridium difficile Vaccine Being Developed

- U.S. Food and Drug Administration (FDA) has granted fast-track designation to Sanofi Pasteur's investigational Clostridium difficile vaccine.

<http://www.prnewswire.com/news-releases/us-fda-grants-fast-track-designation-to-sanofi-pasteurs-investigational-clostridium-difficile-vaccine-106954248.html>

Poliomyelitis Continues to Smolder

- In 2009 there were 1604 cases of polio reported to the World Health Organization.
- As of November 25, 2010, there were 799 reported cases.
- The five countries with the highest numbers of polio cases in 2010 were Tajikistan (458), Pakistan (118), Democratic Republic of Congo (49), India (40), and Angola (29).

<http://www.polioeradication.org/Dataandmonitoring/Poliothisweek.aspx>

LITERATURE ON VACCINES AND VACCINE PREVENTABLE-DISEASES

Hepatitis A Epidemiology in the U.S. 2005-2007

- International travel history was a risk factor in 46% of hepatitis A cases, with 27% having international travel, 5% being exposed to someone with international travel, and 14% with both.
- Other risk factors included:
 - Employed at or a child in a daycare center (7.6%)
 - Exposure during a food or waterborne common-source outbreak (7.2%)
 - Illicit drug use (4.3%)

- Men who had sex with men (3.9%)
- Hepatitis A vaccine was first licensed in the US in 1995.

See the abstract at Archives of Internal Medicine, November 8, 2010 <http://archinte.ama-assn.org/cgi/content/abstract/170/20/1811?maxtoshow=&hits=10&RESULTFORMAT=&fulltext=klevens&searchid=1&FIRSTINDEX=0&resourcetype=HWCIT>

Cholera Vaccine Not Available in US

- The cholera outbreak in Haiti is bringing attention to the need for a cholera vaccine.
- There is currently no cholera vaccine available in the United States.
- Two oral vaccines are available outside the United States: Dukoral from SBL Vaccin AB and a variant only available in Vietnam.
- CDC does not recommend either of these two vaccines for most travelers because of the low risk of cholera to U.S. travelers and the brief and incomplete immunity that the vaccines confer. <http://wwwnc.cdc.gov/travel/yellowbook/2010/chapter-5/cholera.aspx>
- A recent New England Journal of Medicine editorial suggests that a national cholera vaccine stockpile be developed. <http://www.nejm.org/doi/full/10.1056/NEJMp1012300?query=TOC>

Widespread Influenza Vaccination in School Children Gives Direct and Indirect Benefits

- Researchers in Texas gave influenza vaccine to elementary school children and compared the effectiveness of live attenuated influenza vaccine (LAIV) to an influenza shot.
- Forty-eight percent of 4-11 year old elementary school children received influenza vaccine (predominately LAIV).
- Significant herd protection attributed to LAIV was detected for all age groups except 12-17 year old students.
- LAIV was 1.7 times more effective in preventing proven influenza virus infection than among those who received an influenza shot.
- LAIV was 6 times more effective in preventing influenza virus infection than among those who did not receive influenza vaccine.

See Journal of Infectious Diseases, December 1, 2010 at:

<http://www.journals.uchicago.edu/doi/full/10.1086/657089> and accompanying editorial at <http://www.journals.uchicago.edu/doi/full/10.1086/657090>

New Influenza Vaccines of the Future

- Future developments include mammalian cell-based influenza vaccines, vaccines containing adjuvants, and recombinant DNA techniques.

See New England Journal of Medicine, November 18, 2010.

<http://www.nejm.org/doi/full/10.1056/NEJMra1002842?query=TOC>

INFLUENZA NEWS

National Influenza Vaccination Week (NIVW) Celebrated December 5-11, 2010

- The purpose of NIVW is to highlight the importance of continuing influenza vaccination throughout the holiday season, into January, and beyond.
- The slogan for this year's NIVW is the "Flu Ends With U."

<http://www.cdc.gov/flu/NIVW>

Currently Circulating Influenza Strains

- In the week ending 11/20/10, influenza activity had increased to “local” in Texas, Oklahoma, several southeastern states, and Pennsylvania. In Georgia, “regional” influenza activity and high influenza-like illness activity indicators were reported. <http://www.cdc.gov/flu/weekly/usmap.htm>
- About 60% of identified US influenza isolates have been influenza B, and about 40% influenza A (as of 11/22/10). Of the influenza A strains, about 70% have been H3N2 and 30% 2009 H1N1. <http://www.cdc.gov/flu/weekly>
- Identified viruses so far are similar to vaccine strains. <http://www.cdc.gov/flu/weekly>
- Arizona continues to identify sporadic laboratory-confirmed cases in several counties as of 11/20/10. Influenza A and B have both been reported. http://www.azdhs.gov/phs/oids/epi/flu/pdf/influenza/influenza_2010-11_wk46.pdf

Handout for Patients about When to Seek Medical Care for Influenza

- One page handout for patients outlining influenza symptoms that require emergency medical evaluation for children, adolescents and adults.

<http://www.immunize.org/catg.d/p4073.pdf>

CDC Recommends Oseltamivir or Zanamivir for 2010-2011 Influenza Season

- Oseltamivir (Tamiflu®) or zanamivir (Relenza®) continue to be the primary antiviral agents recommended for the prevention and treatment of influenza.
- To date, all three circulating influenza viral strains (2009 H1N1, H3N2, and B) typically exhibit resistance to adamantanes but sensitivity to oseltamivir and zanamivir.

For detailed guidance, see:

<http://www.cdc.gov/flu/professionals/antivirals/summary-clinicians.htm>

High Risk Influenza Patients Need Early Antiviral Treatment

- Early antiviral therapy in high risk patients with suspected or confirmed influenza can reduce the risk of complications in the following situations:
 - Severe illness or hospitalized patient
 - Under 2 years old or older than 64 years old
 - Pregnant or within 2 weeks after delivery
 - American Indians and Alaskan Natives
 - Chronic pulmonary, cardiovascular, renal, hepatic, hematological, neurological, neuromuscular, or metabolic disorders (including diabetes mellitus)
 - Immunosuppressed
 - Morbidly obese
 - Receiving long-term aspirin therapy and less than 19 years old
 - Residents of nursing homes and chronic care facilities
- The greatest benefit is when treatment is started within 48 hours of influenza onset.
- Antiviral treatment may still be beneficial when given over 48 hours from illness onset in patients with severe, complicated, or progressive illness, and in hospitalized patients.

<http://www.cdc.gov/flu/professionals/antivirals/antiviralrec2010.htm>

HOW TO FIND PERTUSSIS VACCINE (Tdap) FOR ADULTS

Broader Tdap Recommendations for Adults

- Pertussis (whooping cough) can infect people of any age and can be lethal to babies and young children.
- Until recently, pertussis vaccines were only approved for use in children up to 6 years of age. However, immunity from pertussis vaccines wears off with time.
- In 2005, a pertussis vaccine was approved for use in people 10-64 years of age (Tdap).
- Only 6% of adults in the US have received Tdap. (2009 National Health Interview Survey <http://www.cdc.gov/vaccines/stats-surv/nhis/2009-nhis.htm>)

On 10/28/2010, the Advisory Committee on Immunization Practices of the Centers for Disease Control and Prevention voted that Tdap be given to those 65 years and older if they have close contact with an infant. <http://www.pediatricsupersite.com/view.aspx?rid=77038>

Challenges in Finding Locations

Important Points to Consider

- Adult health care providers may not always carry Tdap in their offices.
- Not all health insurance plans cover immunizations such as Tdap. Patients need to check with their health insurance company to see what is covered in their plan.
- Pharmacies with certified physicians can give most vaccines (including Tdap) to adults 18 years and older without a doctor's prescription.
 - A pharmacy still needs a prescription in order to give a vaccine to someone out of the licensed age group (such as giving Tdap to someone 65 years or older).
 - In most cases, pharmacies do not have contracts with insurance companies, so the patient is responsible for the cost of vaccines.
- The retail cost for Tdap may range from \$60-\$70.
- Tdap is not routinely given to pregnant women but can be used in special circumstances. <http://www.cdc.gov/mmwr/PDF/rr/rr5704.pdf>

Resources for Getting Tdap for Adults

The following locations may have Tdap. Call these locations in your area for more details about Tdap availability, age ranges, ability to take insurance, cost, hours of operation, and addresses.

- Many private physicians, medical clinics, urgent care clinics, and walk-in clinics including:
 - Mollen Clinic (Maricopa County) www.DrArtMollen.com
 - Passport Health (Maricopa County) <http://www.passporthealthaz.com>
 - Concentra (Flagstaff, Tucson, and Maricopa County) <http://maps.concentra.com/CorporateV3/ListSearch.aspx>
 - Healthwaves (Maricopa County) <http://www.healthwaves.com/Main.html>
- Pharmacies with vaccine-certified pharmacists
- Many county health departments
 - Usually there is a charge when giving Tdap to adults
- Indian Health Service
- Federally Qualified Health Centers usually offer Tdap and can often work with patients to adjust the price based on the patient's ability to pay. These can be found at <http://findahealthcenter.hrsa.gov>.

In addition, a web page that promotes Adacel® (a brand of Tdap) contains a long list of physicians, clinics, and pharmacies throughout Arizona and the United States that carry Tdap: <http://www.adacel-locator.com>

FREE CME COURSES ON INFLUENZA AND INFLUENZA VACCINES

New CDC Influenza Vaccine Online Training Module

- The training is part of the “Immunization: You Call the Shots” series.
- The module provides 1.5 hours of CME (continuing medical education), CNE (Continuing nursing education), or CECH in health education credits.
- The learning objectives are:
 1. Describe influenza
 2. List the groups at highest risk
 3. Identify those for whom routine immunization is recommended
 4. Describe characteristics of the vaccine used to prevent this disease
- To participate, go to <http://www2a.cdc.gov/nip/isd/ycts/mod1/courses/flu/ce.asp> (go all the way to the bottom of the page of this link to start the module).

Influenza Vaccine Safety Training

- The CDC Immunization Safety Office is now offering a 30-minute free CME round table discussion about influenza vaccine safety.
- To participate in this free CME activity, visit Medscape at:
<http://cme.medscape.com/viewarticle/732969>.

Please feel free to distribute ADHS' Arizona Vaccine News to any of your partners who may be interested. Past issues of Arizona Vaccine News can be found at:
<http://www.azdhs.gov/phs/immun/index.htm>